

Fishery Bulletin

CONTENTS

Vol. 80, No. 2

April 1982

POTTHOFF, THOMAS, and SHARON KELLEY. Development of the vertebral column, fins and fin supports, branchiostegal rays, and squamation in the swordfish, <i>Xiphias gladius</i>	161
LOUGH, R. GREGORY, MICHAEL PENNINGTON, GEORGE R. BOLZ, and ANDREW ROSENBERG. Age and growth of larval Atlantic herring, <i>Clupea harengus</i> L., in the Gulf of Maine-Georges Bank region based on otolith growth increments	187
RADTKE, R. L., and J. M. DEAN. Increment formation in the otoliths of embryos, larvae, and juveniles of the mummichog, <i>Fundulus heteroclitus</i>	201
KNIGHT, MARGARET, and MAKOTO OMORI. The larval development of <i>Sergestes similis</i> Hansen (Crustacea, Decapoda, Sergestidae) reared in the laboratory	217
ROSENBERG, ANDREW A. Growth of juvenile English sole, <i>Parophrys vetulus</i> , in estuarine and open coastal nursery grounds	245
AINLEY, DAVID G., HARRIET R. HUBER, and KEVIN M. BAILEY. Population fluctuations of California sea lions and the Pacific whiting fishery off central California	253
HAIN, JAMES H. W., GARY R. CARTER, SCOTT D. KRAUS, CHARLES A. MAYO, and HOWARD E. WINN. Feeding behavior of the humpback whale, <i>Megaptera novaeangliae</i> , in the western North Atlantic	259
SKINNER, RENATE H. The interrelation of water quality, gill parasites, and gill pathology of some fishes from south Biscayne Bay, Florida	269
MILLER, RUTH, and JOHN SPINELLI. The effect of protease inhibitors on proteolysis in parasitized Pacific whiting, <i>Merluccius productus</i> , muscle	281
CLARKE, THOMAS A. Feeding habits of stomiatoid fishes from Hawaiian waters	287
HAYNES, EVAN. Description of larvae of the golden king crab, <i>Lithodes aequispina</i> , reared in the laboratory	305
MANN, ROGER. The seasonal cycle of gonadal development in <i>Arctica islandica</i> from the Southern New England shelf	315
WHITLEDGE, TERRY E. Regeneration of nitrogen by the nekton and its significance in the northwest Africa upwelling ecosystem	327
BRUNDAGE, HAROLD M., III, and ROBERT E. MEADOWS. The Atlantic sturgeon, <i>Acipenser oxyrinchus</i> , in the Delaware River estuary	337

(Continued on next page)

Seattle, Washington

1982

Contents—continued

MATARESE, ANN C., and JEFFREY B. MARLIAVE. Larval development of laboratory-reared rosy lip sculpin, <i>Ascelichthys rhodorus</i> (Cottidae)	345
WOLFF, GARY A. A beak key for eight eastern tropical Pacific cephalopod species with relationships between their beak dimensions and size	357
AU, D., and W. PERRYMAN. Movement and speed of dolphin schools responding to an approaching ship	371
TRUMBLE, ROBERT J., RICHARD E. THORNE, and NORMAN A. LEMBERG. The Strait of Georgia herring fishery: A case history of timely management aided by hydroacoustic surveys	381

Notes

DAWSON, MARGARET A. Effects of long-term mercury exposure on hematology of striped bass, <i>Morone saxatilis</i>	389
KAYA, CALVIN M., ANDREW E. DIZON, SHARON D. HENDRICKS, THOMAS K. KAZAMA, and MARTINA K. K. QUEENTH. Rapid and spontaneous maturation, ovulation, and spawning of ova by newly captured skipjack tuna, <i>Katsuwonus pelamis</i>	393
LO, NANCY C. H., JOSEPH E. POWERS, and BRUCE E. WAHLEN. Estimating and monitoring incidental dolphin mortality in the eastern tropical Pacific tuna purse seine fishery	396
JOYCE, GERALD G., JOHN V. ROSAPEPE, and JUNROKU OGASAWARA. White Dall's porpoise sighted in the North Pacific	401

Notices

NOAA Technical Reports NMFS published during the last 6 months of 1981

The National Marine Fisheries Service (NMFS) does not approve, recommend or endorse any proprietary product or proprietary material mentioned in this publication. No reference shall be made to NMFS, or to this publication furnished by NMFS, in any advertising or sales promotion which would indicate or imply that NMFS approves, recommends or endorses any proprietary product or proprietary material mentioned herein, or which has as its purpose an intent to cause directly or indirectly the advertised product to be used or purchased because of this NMFS publication.